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UNITED STATES
DEPARTMENT OF THE INTERIOR
DI-6

Book 1.
Casselman Basin Field Notes

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Field Notes - Castleman basin mapping

Compiled -

June 1945 - June 1946 intermittently - Waage
June to mid August 1947 - Amsden
mid August 1947 - mid Sept - Waage
June to Sept 1948

Part 1. Notes covering area of Castleman Basin on N½ Grantsville 7½ min. Quad and N½ Avilton 7½ min. Quad

Part 2. Notes covering area of C.B. on S½ Grantsville Quad.
S½ Avilton Quad
S½ Accident Quad

Part 3 Notes covering area of C.B. on Bittinger 7½ min Quad (N+S ½s)
McHenry 7½ min Quad (N+S ½s)

1 8 3

Part 1.

Station.

1. s ~~Bender &~~ Beachy mine, Upper Freeport. (Mine # 15 of Q.S. report. ≠ Bender & Beachy mine) U.S.B.M. calls this Beachy #1 mine. A slope in to the U.F. – not a crop mine. Operator (1948) = Meyers Coal Co.

2. s Beachy mine - crop opening on U. Freeport. (Q.S. may include this with his #15)

3. Two old crop openings in U. Freeport collectively called Butler mine.

4. Bender & Beachy mine. Slope intended to hit U.F. No data as to what it did hit. No coal evident

5. s Sloan Mine, crop mine on U.F., operated (in 1948) by Patten.

6. s Shaw Mine, crop mine on U.F. (descr. in 2nd coal Rept., p. 285)

7. C.H. Bill mine, long abandoned. No record - probably Upper Kittanning.

Mine Sections - Area 1.

Station

1. (QS. 15) Sections from QS.

Shale roof		Black shale	
Coal	8	Coal	10½
Shale	1	Shale	1
Coal	23½	Coal	22½
Shale	1½	Shale	1½
Coal	6	Coal	7
Shale bottom		Black shale	

2. U.S.B.M section 100' in entry. Dip S 60 E. (?)

Shale roof	
Coal	10
Shale	½
Coal	24
Shale	1½
Coal	7
Limey claystone	

5. U.S.B.M section 300' from adit, Dip 8° S60E.

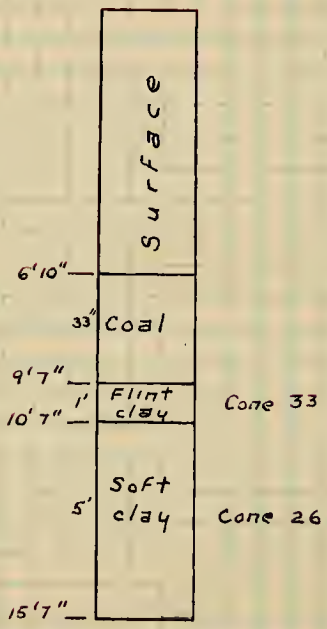
Shale roof	
Coal	10
Bone	½"
Coal	25½
Shale	1
Coal	5

8. and 9.	s.	Opel mines. Crop openings in the U. Freeport. (Maybe #27 of QS., who calls it Brush Creek, may also be a B.C. mine up slope from Opel openings. Check for it
10.		No information available. Brush Creek crop opening.
11.		Crop opening in Lower Bakerstown
12.	s.	Crop opening in Harlem. Wilson Miller mine. Abandoned.
13.		Crop opening, very old, probably by C.H. Bill.
14.		Old stone quarry in massive sandstone ledge.
15.	s.?	Gumshoe Mine, crop opening in Upper Freeport.
16.	s.	Old Patton mine, crop opening in Upper Freeport. Operator (1948) Yoder.

Negro Mt., N. U.S. Hwy. 40.
Yoder Property
U.F.B. Co. pit.

Station 20

Test pit #1
1" = 5'



17. S. H.L. Bowman mine, crop opening in Upper Freeport. (#16 of QS.)

18. S Opening in Upper Freeport. Raymond Klotz + Ray Doerr

19. Coal outcrop in road. This is crop of coal in test pit -(see Station 20). Clay outcrop also; at road bend S of coal.

20. S Test pit putdown by Union, information from Mathias. Yoder property. See log TP #1. above.
This coal is probably the Upper Kittanning.

May be

Mine Sections (cont.)

Station

6. Section in 2nd coal Rept.

Shale roof
Coal ———— 11
Shale ——— 1½
Coal ———— 22½
Shale ——— 2
Coal ———— 8
Shale bottom

8. USBM section on crop between entries.
Dip 5° S 70 E

Shale roof
Coal ——— 11
Shale ——— 1/2
Coal ——— 23½
Limey shale

12. QS section
Bony fossiliferous shale
Coal ———— 16
limestone

15.

21 Creamery on U.S. 40, Grantsville.
Log of water-well drilled for the plant.

Drillers log: — churn drill.

Surface	0	—	2
Yellow s.s.	2	—	25
Soapstone	25	—	53
Gray ss.	53	—	88
Coal	88	—	90
Soapstone	90	—	115
Gray ss	115	—	125
Black slate	125	-	160
Gray sand	160	-	165
Soapstone (getting black)	165	-	198

Coal is probably the ~~Barton~~. Wellersburg.

22. Crop mine - Upper Freeport coal.
D + S on shales at entry (N. 60 E. 8° SE)
not accurate due to slumping.
This is Volk mine of QS. report.
Section similar to #18.

Mine Sections (cont.)

Station

16. U.S.B.M section in main drift (N 15 E) 200' from mouth. Dip 6° S 70 E

Shale roof
Bony coal —— 1½
Coal —— 9½
Shale —— 1
Coal —— 25
Claystone bottom.

17. Q.S. section

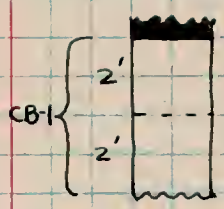
Black shale
Coal —— 9½
Shale —— 1
Coal —— 22½
Bony shale —— 1
Coal —— 3
Limey shale bottom

18. U.S.G.S. Section. Heading N 20° E
Attitude on shale binder N 5° E, 8 E

Black shale roof
Coal —— 11
Shale binder —— ½
Coal —— 21
Shale binder —— 2
Coal —— 3
Gray silty claystone bottom.

29. See bottom next page.

23 Crop of Lower Bakerstown coal on farm of Dan. J. Brenneman. Clay prospect - Sample CB-1 from crop under L.B. coal.



(See CB-1 in clay tests)

Under the clay is thinbedded ss., N20 E, 14 E.

24. Down gulley from 23, silty sh, + shale or claystone exposed about half way down, lower part in sandstone to bottom.

25. Coal outcrop - Harlem. ? or Upper B.

Mine Sections (cont.)

Station (40. — see below)

41. U.S.G.S. section.

Attitude on shales above coal.

Shale roof

Coal —— 38 to 42

40. U.S.G.S. Section — Black shale marine fossils

Coal —— 16

42 Dark gray shaley clay bottom.

29. Q.S. Section

Carb. shale

Coal —— 2½"

Shale —— 1

Coal —— 5

Shale —— 5 feet

Boney coal —— 9

Shale —— 2½

Coal —— 21

Limestone

Coal _____ 2.
Limestone

26 Outcrop of Brush Creek coal in SE side of road cut. Above, ~~on~~ hill knob developed on Brush Creek marine shales. Fossils in float.

27. Seep at road intersection. Seepage from flat to N.E... Upper Freeport horizon. Line of seeps continues north along road.

✓ 28. Old opening. Probably a C.H. Bill job.

✓ 29. s Abandoned, caved & filled opening of H.S. Yoder. (QS.#11). Harvey Yoder worked it in first war. Reported to be 25" coal + sh. + 15" coal.

30. Outcrop of Ames marine shale

31 Attitude on shaley claystone N.67°E, 6°W

32 Attitude on N67°E, 3°W

33 Attitude on shale N. 28° E, 3° W.

34 Attitude on shaley ss. N 8° E, 10° W.

Mine Sections (con't)

Station

58.. Q.S. section. Heading S. 78° E

Black fossiliferous shale

Coal ———— 18

Shaley limestone.

59. U.S.G.S. section Attitude on shale N14E, 5°E

Silty claystone roof

Boney + shaley coal — 25"

Coaly shale ———— 5

62. U.S.G.S. section.

Sandstone grading to sandy shale roof

Black shale ——— 9

Coal ———— 5½

Carb. shale ——— 1

Coal ———— 19½

Claystone bottom

Up or Mid K

Attitude on gray shale (roof) N8°E, 10°W

71. Q.S. section

Gray shale roof

Boney coal ——— 9

Bone ———— 2½

Coal ———— 16 (varies)

Black shale + argill. limestone.

35. Attitude on shaley ss. N.70°E, 12°W.

36. Abandoned mine in Upper Freeport behind Stone House barn. Sensenbaugh Mine, worked by Metz. Sam Yoder says coal 28". Mined downdip.

37 Exposure of Brush Creek shale in road cut, S side U.S. 40 just above Stone House. Marine fossils scarce except in lower part. (Attitude: N 63° E, 7° W)

38 Coal crop in road gutter, most likely Lower Bakerstown.

39 Coal crop in road gutter, probably Lower Bakerstown.

40 S An old opening and recent prospect in the Harlem coal. Merrbach said to have opened old one - not much taken out. Sam Yoder had new prospect opened.

41 S ~~Merrbach~~ Merrbach Meadow Mountain Mine. Entry on slope to Upper Kittanning from lower (west) end of old Stone House stripping. There used to be several old adits up hill from this mine before stripping was started. Trace of these destroyed by stripping. They were down dip in Upper Kittanning.

Mine Sections (Cont.)

Station.

73. U.S.G.S. Section.

Roof siltstone + gray silty shale

Coal with thin shale partings —— 27

Coal —————————— 7

Gray shale —————————— 6

Coaly shale —————————— 9

Coal —————————— 14

Dark gray argillaceous limestone bottom.

84. U.S.G.S. Section

Dark gray shale roof

Coal —————— 30

Siltstone —————— 17

Coal —————— 15

Bottom

85. QS. section

Black fossiliferous shale

Coal —————— 20

Limestone

86. Q.S. Section

Boney shale —— 3

Coal —————— 14

Bone —————— 1½

Coal —————— 7

Limestone.

42. Stone House stripping:

In separate file.

44. Seepage and swampy area across old logging road. A drainage ditch exposes gray white plastic clay. Probably cropping from below coal, is non-sandy + shows no contamination. No flint clay in float but 1 piece mahogany flint about 2" long found in roots of overturned tree alongside drainage ditch. This is about where Mt Savage horizon should come on Mt.

45. Stone House – Little Meadows old logging road. On seepages most the way to end at sawdust pile. Quite likely on same seam all the way and it is probably the Upper Kittanning.

46. Old diamond drill hole on Schoolhouse run, on what once was Elijah Livingood farm. Record of this in QS. report. See files on Foreign Holes for graphic log.

47 Old diamond drill hole.

48 Old diamond drill hole

49.

50.

51 Quarry in ledge of massive sandstone. May be ss. overlying Mt. Savage.

52. Road cut showing about 10" coal with bone + shale partings overlain by black shale and underlain by weathered (limonitic) clay and silty claystone. Attitude (est.) N 85° E, 6° N. On N end of cut coal seems to flatten out + there may be slight reversal of dip.

53 Sandstone channel on black shale in roadcut just s around curve. This ss is basal part of predominantly clastic section to top of hill.—

Basal ss 15–20'
Soft beds – obscured – 10' ±
Sandstone – 10–15'
Shaley claystone + siltstone with sandy zones + lenses — 15–20'

53 (cont.) This latter has carbonaceous streak at top locally.
Over this zone another ss, ± 5' comes in, then additional soft beds and another thin ss on hilltop.

All ss's cross laminated, so are most the claystones & siltstones between.

54 Old drill hole on former C.H. Bill farm.

55. C.H. Bill openings. 2 old entries. Abandoned & caved

56 Abandoned & caved opening, also owned at time of digging by Wilson Miller (See #12 – mine in Harlem down slope from this opening.) Coal reportedly slatey – probably Federal Hill.

57. Bender & Beachy Upper Kittanning opening on C.H. Bill property. Abandoned & caved.

58. s. Abandoned & caved mine in the Harlem coal. Black shale with marine fossils on dump. Charles H. Bill owned it. (Q.S. – #13)

59. s Old caved opening, a second opening present about 15' south of it. Josiah W. Durst mine (Q.S. #22) Upper Bakerstown. Overlain by siltstone & silty claystone.

60 Exposure of 10' silty gray claystone overlain by 10' siltstone. Attitude on latter N 11° E, 7° E.

61 Abandoned & caved opening in the Lower Bakerstown. Maust mine. Heading 77° SE. Coal overlain by sandstone & shale – Attitude on SS. N 77° W, 9° E.

62. s. Abandoned coal mine, heading N 4° W.

63 Abandoned and caved opening in the Lower Bakerstown. Neuman's (Noy?) mine. Locals report 22 to 28 inches of coal.

64. Mine, reopened 1947 but no coal taken + since caved. Heading N 70 E. Also mine of Noy Neuman. Locals report 4' coal. Upper Freeport.

65 Abandoned & caved mine in Upper Freeport. Heading N 63° E. Worked about 1939-40 only few tons taken. Opened by Boardman. Locals report 4' from shallow drill hole in field above mine.

66 Abandoned + caved mine opening Direction of heading S.65° E.

67 Well drilled, encountered 18" coal at 35 ft. vide Harrison Yommer

68 Yommer says groundhog dug out coal here.

N

69. Attitude on flaggy ss. N 66° E, 8° W
Black shale outcrops 150' up gulley

70 Coal prospect on Harrison Yommers farm. 20" coal with claystone roof and floor.

71 S Abandoned and caved mine. Heading N 32 E. There is a second opening 75' west along hill with heading N 40° E
Norman Miller mine, # 12 of QS.

72 Abandoned & caved mine. May be QS #7 - check

73. S Abandoned coal mine. Attitude on roof shales N 26° E, 7° W.
Heading ~~N 28° E.~~ S W Eli Yoder owns it.

74. Attitude on silty shaley claystone N 56° E 6° W.

75. Abandoned and caved coal mine Heading N 27° E. Probably W.C. Loechel mine (QS. #8) Same coal as 73.

76 Coal smut at top of bank.

77 Carb. shale in road cut.

78. Coal crop in stream gulley. Shows Upper bench, 1½' parting, lower bench.

79. Coal outcrop in road bank

80. Attitude on silty clay shale N 58 E, 6 W

√ 81 Abandoned and caved coal mine. Coal + boney coal on dump.

82 Attitude on gray shale N 58° E, 6° W.

83 Coal crop in road bank.

√ 84 S. Abandoned coal mine. Attitude on coal N. 55 E., 12° W. Second opening, caved, 30' S along hill. (See also section ~~+ attitude~~)

√ 85. S Abandoned and caved coal mine. Black shale with marine fossils on dump. Worked by B.L. and U.O. Blocher. Heading N 65 W. Harlem coal. (QS. 9)

√ 86. S. Abandoned + caved mine in Upper Bakerstown, worked by Blochers (see above) (QS. 10)

87. Coal prospect, black shale with marine fossils on dump. Harlem coal.

✓ 88 Coal mine, caved. Black shale with marine fossils on dump. Heading S 85° E. There is a 2nd caved opening 25' S. Harlem.

89 Coal prospect exposing gray shaley claystone, no coal. Coal blossom of about 1' on crop. Some black shales, no marine fossils.

✓ 90. Lower Bakerstown mine owned by Homer Durst.

✓ 91. Caved opening of Homer Durst in Upper Bakerstown.

92 Lower Bakerstown crop in stream. Soil top, 26" coal, light gray undercley.

93 Coal prospect, dump with coal and black shale. Limestone ledge crops 20' below. Attitude on latter N 5° E, 4° W

94. Attitude on sandstone N 20° E, 8° E

95. Old Bender and Beachy mine on former C.H. Bill farm. Abandoned & caved. Probably Upper Kittanning. Coal reported to be about 2 feet.

96. Old prospect pit, now site of outhouse.

97. Abandoned but partially open mine. Opened by Hersker and called "Shade No. 1". Bill Miller ("Lyin' Bill") reports following section:-

Sandstone
Draw slate —— 6 ft.
Coal —— 23 to 25
Shale —— 1
Boney coal —— 2 to 4
Hard sandy clay – 1 to 1½ ft

Believed is under bottom clay.
May be either Lower Freep or Upper Kitt.

98. Old prospect for Upper Freep. by Sam Yoder.

99. Water hole drilled by Tressler at Arlington Tavern.

Ames records on drill list 30'?

PART 3

PART 2

PART 3

PART 2

PART 3

PART 2

PART 3

PART 2

PART 1

PART 2

PART II

1. Harry Wildt mine – Lower Bakerstown crop. Abandoned

2. Elijah Livengood mine – Allegheny Coal Corp. Lower Bakerstown crop. Abandoned ?

3. s Ross + Ambrose openings – Lower Bakerstown (#57 of QS) Abandoned

4. s Mogart – Upper Bakerstown opening. (#57 of QS) (Morgart #6) Abandoned

5. Harry Miller – opening in Lower Bakerstown Fuel mine only

6. s. Ray Billmeyer mines, John Orr ~~operator~~ owner, Lower Bakerstown crop. (#55 of QS) Abandoned.

7. s. Everitt Platter – Lower Bakerstown opening (#53 of QS.) Abandoned

8 s. Handwork Mine – owner Victor Miner, Lower Bakerstown crop (#52 of QS.) ~~Abandoned~~.

9. Chris Yommer Mine – owner Victor Miner, Lower Bakerstown crop. Abandoned

Mine Sections — Area 2.

Station

3. Q.S. section

Black shale roof
Coal ———— 25
Clayey shale

4. Q.S. Section

Shale roof
Bony coal ———— 6
Coal with shale partings — 30
Shale ———— 3
Coal ———— 6

Total 45

5.

10. s. Hoover Mine - Lower Bakerstown coop. (#49 of Q.S.) Abandoned

11. Elmer Miller opening in Lower Bakerstown. Abandoned

12. John Miller mine. Abandoned
Lower Bakerstown opening (#48 of Q.S.)

13. Outcrop of Lower Bakerstown coal.

14. s. Butler's (Sugar Camp) opening in ~~Brush Cr.~~ Lower Bakerstown.
Heading N 23° E. Abandoned
↘ check with USGM info.

15. s. New Butler mine, owner Hampton Butler, Lower Bakerstown.

16 s Old Butler mine, owner Hampton Butler, Lower Bakerstown. (#47 of Q.S.)

17 s James Bittinger openings, Hampton Butler owner, Lower Bakerstown. (#47 of QS.)

Mine Sections — Area 2 (cont.)

Station

6. Q.S. section

Black shale roof
Coal ———— 25
Clayey shale

7. Q.S. section

Black shale roof
Coal ———— 27
Clayey shale

8. U.S.B.M section - Drift N.50°E.

Shale roof
Bone ———— 1
Coal ———— 28

10. Q.S. section

Black shale roof
Coal ———— 27
Clayey shale bottom

14. U.S.B.M. section - Drift N 35°W

Coal ———— 30

15. U.S.B.M. section Drift N.50°E, dip 8° N 50°W.

Bone ———— 2
Coal ———— 32

✓	~~30~~ 18.	Jacob Kinsinger openings (old) in Lower Bakerstown. Caved
✓	19. s.	Morgart #1 (Now called Louis mine by A.C.C., the present (1946) operators). Lower Bakerstown (GS. 1965)
✓	20.	Old caved opening in Lower Bakerstown.
✓	21. s	Old Ridgely Mine - Norman Baker owner, Upper Freeport. ?
✓	22.	Ridgely Mine - Norman Baker owner Upper Freeport. ?
✓	23 s.	Earl Stanton Mines, (Kiester operator?) Upper Freeport.
✓	24.	Fred Vodder - Brush Creek openings.
✓	25 s	McKenzie openings in Upper Freeport. John Hershger owner.

Mine Sections Area 2 (cont.)

Station

16. Old section from Martin (After QS)

Shale roof
Bone ———— 8
Coal ———— 32
Soft shale bottom

17. U.S.B.M section

Shale roof
Bone ———— 2
Coal ———— 32

19.

21. U.S.B.M. Section (at portal) Dip 9° S 65° E (Drift S 75° E)

Coal ———— 14
Bone ———— 1
Coal ———— 25
Shale ———— 1
Boney coal ———— 9
Sandy shale

(See QS. for other sections which may either be this mine or # 22.

26. Harry Brodwater mine, Fred Yoder owner, Lower Bakerstown.

27 Tadpole Mine, John Hershger owner, Lower Bakerstown. (QS-27)
(Martin gives 24" – vide QS) Formerly owned by Lloyd Baker.

28 s Two Lower Bakerstown openings owned by Orville Kinsinger. (QS-29)

29 Lower Bakerstown opening of Paul Kinsinger. (QS-30)

30 Upper Bakerstown opening of Paul Kinsinger.

31 s. Guy Stanton mines in Lower Bakerstown ~~owned~~ owned by Sherman Miller.
operated

32 s. Hockman Mine, Upper Freeport.

Mine Sections Area 2 (cont)

Station

23. Q.S. Section

Black shale roof

Coal ———— 7

Shale ———— 2

Coal ———— 24

Shale bottom

Section from 2nd Coal Report (includes rider)

Black shale roof

Coal ———— 21

Shale ———— 1/4

Sandstone ———— 18 to 36

Coal ———— 12

Shale ———— 1 to 2

Coal ———— 28

Sandy shale bottom

Section by U.S.

25. USBM Section at portal near a middle entry

Black shale roof

Coal ———— 9 1/2 Dip 5° N 80 E

Bone ———— 1/2

Coal ———— 22

Limey clay bottom.

✓ 33 Old caved opening in Harlem, good marine fossils on dump.

Can't be — falls on FH crop — dump may be contam from road cut material.

34 Outcrop of Harlem coal and overlying Ames shale with marine fossils.

35 Coal crop in gutter at NE corner of barn.

✓ 36. s. Opening (old, caved, seems to have been double) in Harlem coal. Fossils plentiful on dump. (Sam Hares mine, # 44 of Q.S.)

37. Two swampy, heavily stained seeps probably representing Upper + Lower Bakerstown coals.

✓ 38. Old opening in one of Bakerstowns, according to Harry Miller it resembles 'slate vein' in dump material. (It must be close to #26 of Q.S.) It 26 of Q.S. it is Lower Bakerstown.

✓ 39. Old opening in the Brush Creek coal. Fossils on dump.

Mine Sections — Area 2 (cont.)

Station.

28. U.S.B.M. Section — South adit of 2. Drift. N 60° W
Dip. 5° S 50 E

Shale roof
Coal ——— 27
Clay bottom

31. Q.S. Section (See Q.S. for Martin section)

Black shale roof
Coal ——— 25
Gray clayey shal

32. U.S.B.M. section Dip 7° S. 50. E
200' from adit Drift S. 50. W.

Coal ——— 8
Bone ——— 1
Coal ——— 20

36. Q.S. Section

Black shale, marine fossils
Coal ——— 19

64. Q. S. Section

Black shale roof
Coal ——— 40
Clay ——— 2½
Coal ——— 10
Clay bottom

40. Attitude on shaley ss. N 8° E, 5° W.

41 Attitude on shaley siltstone N 42° E, 10° W

42 Coal crop. About 5" of coal with underclay. Overlain by black shale grading upward thru sandy shale to shaley sandstone. (Attitude on black shale N 87° W, 1° E.

43 Attitude on shaley claystone N 53° E, 6° W.

44. Attitude on sandstone N 31° E, 7° W, possibly x-laminated.

45. Attitude on shaley siltstone N 55° W, 6° E. Underlain by fossiliferous black shale (Ames) on down hill to west.

46. Attitude on silty shale. N. 28 E., 15° E

47. Coal crop. Underlain by silty claystone. Gray clay then black shale overly it.

48 Coal + clay crop. Two thin beds of coal, the lower overlying a zone of clay which includes silty flint clay (fragmental) Upper streak is probably Freeport rider, lower, the Freeport.
Attitude on shaley bed between two N 80–87 E, 9° W.

Mine Sections — Area 2 (cont.)

Station

68. Q.S. section
Black shale - marine fossils
Coal ———— 20
Shale

74. U.S.G.S. section
Black shale roof Heading N 60° E
Boney coal ——— 44
Gray silty claystone bottom.

75. U.S.G.S. Section
Grey silty claystone roof
Coal, bone + shale ——— 13 RIDER.
Dark gray to black silty claystone – 10
Fine grained sandstone ——— 20
Dark gray to black silty claystone – 9
Coal ———————— 20 FREEPORT.
Claystone bottom.

79. Q.S. section
Shale roof
Coal ——— 25
Clayey bottom..

80. Q.S. section
Shale roof
Coal ——— 26
Clayey bottom

49. Coaly wash.

50 Coal crop. Shaley claystone above, clay below.

51 Coal blossom

52 Coal blossom, in road gutter downhill from seep.

53 Coaly wash

54

55 Attitude on shaley siltstone N. 70 W., 3° E

56 Coal bed crops in road. Estimated 20" coal. (Attitude on the coal N1° E, 15° E)

57 Stripping in Upper Freeport coal on Kermit Bittingers property. No coal was taken — probably trouble with river.
Attitude on black shale N. 24° E, 8° E.

58 Two openings in the Brush Creek coal. At creek level. Marine fossils on dump.
Attitude on black shales upstream from dump - N21° E, 8° E. (QS.-62)

Mine Sections Area 2 (Cont.)

Station

82.

83. QS. section
Black shale roof
Coal ——— 26
Clayey bottom

86. Q.S. sections

Black shale roof	same
Coal ——— 24	Coal ——— 26
Clayey bottom	same

90. Q.S. section
Shale roof
Coal ——— 26
Shale ——— 2
Coal ——— 10
Shale floor

94.

59 Green shale stained red, overlain by red-bed. Attitude on shale N 19° E, 4° E.

√ 60 Old opening in the Upper Freeport. ? Probably QS-64, James Resh

61 Coal prospect, black shale on dump, no coal exposed.

√ 62 Old opening in Upper Freeport. ? Resh, probably James or Clarence.

√ 63 Old openings, 4 in all in the Lower Bakerstown. (Q.S. - 63, Simon Resh mines - coal reported by latter as 24")

√ 64. s. Old opening. Ella Bevan mine #60 of Q.S. who reports coal "very streaky". Same seam as in crops at stations 56 & 69. Probably Barton.

√ 65 Old opening - ~~James~~ Clarence Resh, may be either in L. Freeport or U. Kittanning According to Snyder this was little more than a prospect. Seep and plastic clay in bank just upstream from this.

Mine Sections Area 2 (cont)
Stations

95. Q.S. Section
Black shale roof
Coal ———— 26
Dark gray clayey bottom

98. U.S.G.S. section
Attitude on shale parting N 44° E, 2° W
Black shale roof
Boney coal ———— 23
Boney coal + shale — 18
Gray silty claystone bottom.

99. U.S.G.S. section
Black shaley claystone roof
Bone ———— 3
Coal ———— 29
Gray soft clay bottom

Q.S. section
Shale
Boney coal ——— 4½
Coal ———— 29
Clayey bottom

107. USGS section (crop)
Black shale roof
Coal ———— 22
Gray clay bottom

66. Coal outcrop in rd. gutter. Attitude N. 84° E, 2° W. This is probably the Upper Bakerstown.

67. Union Fire Brick Co. exploration on Meadow Mountain. Diamond drill and test pit logs & map furnished by Max Mathias – see file on U.M.Co.
67 – also shows coal crop in gulley.

68. S. Outcrop and coal prospect on Harlem coal. Crop in gulley shows overlying fossiliferous shale, coal and underlying beds. (QS.-39- Mckinley Beach Prospect)

69. Outcrop of coal behind barn. Presumably same as that in mine and road bed. Barton?

70. Coal smut in road gutter. This is trace of Upper Freeport coal.

71. Red beds. Mahoning, – lie between Freeport & Brush Creek.

72. Old openings in Upper Freeport. exact location of one nearest barn not known.

Mine Sections Area 2 (cont)

Station

110. USGS section on face of old stripping (SE corner)

Shale with lenses of sandstone up to 12' thick ——— (20'±)

Coal ——— 18

Coaly shale — 4 to 8 inches

Coal ——— 18

111. USGS section. Fresh strip face ± 25' below surface.

Shale roof ——— (20' ±)

Coal ——— 18

Shale ——— 1

Coal ——— 23

114. QS. section

Black shale roof

Coal ——— 28

Shale ——— 2

Bony coal — 5

Clayey bottom.

73. Coal smut in road gutter, and weathered clays with some red below (further down hill). Harlem & Pittsburgh red.

74. s. Opening in Upper Bakerstown. Was operated by Jack Stanton. Direction of heading was 60° NE.

75. s. Openings in Upper Freeport worked by D. Yommer. (Probably #46 of P.S.)
Upper Freeport 22½" coal
Rider 10" coal and partings.
Altitude on 1' sandstone directly overlying U.F. — N 52° E, 7° W.

76. Prospect in Upper Freeport showing
1' ss
4" bl. sh.
18" coal

77. Caved mine in Upper Freeport. Harry Miller says it is probably another D. Yommer opening.

78 Coal blossom in rd. bank. Probably Brush Creek.

Mine Sections, Area 2 (cont.)

Station

121. QS. Section.

Shale roof
Boney Coal —— 5
Coal —— 16
Shale

124. [illegible]

132. USGS section.

Gray shale
Carb. sh, coaly streaks —— 8"
Gray shale —— 4
Carb sh. coaly streaks —— 10"
Gray clay —— 16
Bone & carb shale —— 9"
Coal —— 6
Coaly shale & bone —— 16
Coal —— 5
Silty black clay

✓ 79 s. Gregory Bevan's mines in Lower Bakerstown. (#33 of QS)

✓ 80 s Old Orendort mines (2 openings) in Lower Bakerstown (#34 of QS)

✓ 81 Jonas Folk mine - in lower Bakerstown

✓ 82 s Lee Brodwater mine (formerly a Ralph Miller opening) in Lower Bakerstown

✓ 83 s Old Ralph Miller mine in Lower Bakerstown (#32 of QS)

✓ 84 Chris Yommer Mine in lower Bakerstown. Check to see if this corresponds to #40 of QS

✓ 85 Old Lower Bakerstown opening (QS #41)

✓ 86. s Old opening in Lower Bakerstown.
Coal overlain by -
5' limey claystone + argill. limestone
1½' grey silty shale
1' black shale
4' grey + black silty shale
coal

133. USGS. sections Mt Savage coal in Negro Mt. Stripping.
(See map for location of sections)

A.

Dark gray shal
Coal with a few 'knife blade' partings —— 29
Carb. shale —— 18
Gray soft clay

B.

Dark gray shale, silty
Coal (dirty) —— 16
Silty carb. shale —— 8
Boney coal —— 3
Silty soft clay

C.

Dark gray argillaceous siltstone
Coal —— 12
Soft gray clay

(Note)
30' east of section C coal locally completely absent.

E.

Black shale
Coal —— 16
Carb shale —— 1
Coal —— 13
Carb shale boney streaks —— 10
Gray soft clay.

D.

Gray to black shale
Coal —— 18
Carb. shale —— 3
Coal —— 8
Carb shale boney streaks —— 9
Gray soft clay

F. (Both M.S. rider and main bed)

Rider * - Scrubgrass.

Gray to black shale
Platey sandstone —— 4
Carb shale —— 3
Coal —— 7
Carb shale —— 4
Coal —— 7
Gray silty claystone

Main bed.

Black shale
Coal, knife-blade partings —— 27
Carb shale —— 6
Gray soft clay.

Coal ——— 7
Gray silty claystone

Carb shale ——— 6
Gray soft clay.

*(See F above) Rider measured where at maximum thickness in strip. It is often absent, usually a few inches of coal.

86 (cont.) Attitude on black shale ~~N 85° E, 6° E~~ (taken near R.R. tracks.)
This opening same as QS #5. Called. U.M. Stanton Mine. (See also 2nd Coal Report)

✓ 87. Coal mine — slope to Lower Bakerstown. Connected underground with #86. Probably included in QS #5.

88. Attitude on interbedded siltstone and fine sandstone N 38° W, 3° E.

✓ 89. Jason Wilburn opening in Harlem (QS. #35) Caved. Heading N 45° W. S E
Marine fossils in shale on dump.

✓ 90. S. Mine in Upper Bakerstown. Abandoned. Coal overlain by silty claystone grading upward into sandstone (Saltsburg) Direction of heading N 78° E. Probably same as QS #58, the Hooker Billmeyer mine.

✓ 91. Caved opening in Harlem. Marine fossils in shale on dump. Heading N 30° W. The Charles Ross mine — #43. of QS. Was never much more than a prospect.

134. USGS sections, "Church Property" stripping of U.F.B.Co. (See map for location of sections)

A	B	C
Gray shale	Black shale	Gray shale
Coal — 15	Coal — 15	Coal — 13
Carb. shale — 2 to 3	Shale (carb) — 1	Carb shale — 0 to 3
Coal — 15	Coal — 15	Coal — 14
Carb. shale bone — 8	Carb shale — 5	Carb shale — 7
Soft gray clay.	Bone — 4	Bone — 4
	Carb shaley claystone — 7	Carb shale — 5
	Soft gray clay	Soft gray clay

135 Burnwell Stripping sections — U.S.G.S.

A. Rider coal. (± 20' over main bed) Measured where it appears to be at maximum thickness.

Carb. shale
Coal — 6
Shale — 10
Coal — 1
Shale — ½
Coal — 7
Gray claystone.

B. Main bed. (USBM section — opening in Kiester strip.)

Coal — 22
Shale — 10
Boney coal — 10
Bone — 2
Coal — 32
Shale

✓ 92. Caved opening in Harlem. Marine fossils in shale on dump. Heading N. 51° W. SE

✓ 93. Two abandoned + caved openings in the Lower Bakerstown. Edward Swager mine - # 51 of QS. Heading N. entry N 45° E, S. entry N. 57° E.

94. S. Coal outcrop in stream, overlain by claystone - then shaley sandstone. Altitude on coal N 15° E, 5° W. Coal was prospected on stream bank. 100' SW It is Upper Bakerstown.

✓ 95. S Abandoned entry in Lower Bakerstown. Elmer J. Beachy mine - # 24 of QS.

✓ 96. Three abandoned openings (prospects) in the Upper Bakerstown. Heading in one is N 34° E. Reported opened by a Swager. QS # 25.

✓ 97. Prospect in Upper Bakerstown. Caved shaft. Coal + shale on dump.

✓ 98. S Chris Durst mine in ~~Lower~~ Upper Bakerstown. Open but not working (Summer '48). Heading N 4° E.

✓ 99. S. Mine in Lower Bakerstown. Open but not working. (Summers #48) Harry A. Miller ("Clean Harry") Mine — QS. #86.

✓ 100. Caved and abandoned opening in one of upper Conemaugh beds - ~~probably same as first coal cut in DDH #4CB~~. Direction of heading N 53° W. (QS 511)

✓ 101 Prospect, old. coal + shale on dump. Same coal as in 100.

✓ 102 John Hare mine in Harlem. Caved. Marine fossils in black shale on dump. (QS. 54)

✓ 103 Caved & abandoned mine. Coal & shale with plant remains on dump. Probably same as one located by QS. as Martins #510. QS. gives no description. Probably Upper Bakerstown.

✓ 104. Two abandoned openings in the Lower Bakerstown. Opened by Levi Resh. Attitude on sandy shale (above coal) — N 81° E, 5° W. Heading N 65 E. (QS #72)

105. Old opening made by George Bittinger. Said to be in "Honeycomb" but may be in Harlem.

✓ 106. Another Hump Butler opening in lower Bakerstown, about 55° NW of #14. Heading N 15° E.

107 S. Outcrop of Harlem coal in road bank. Overlain by black shale; red shale comes in below on slope, just S of barn.

✓ 108 Obliterated Harlem opening, dump with marine fossils in shale

✓ 109 Three abandoned + caved openings in coal above Harlem horizon. Harry Miller reports 30" coal. Probably Barton.

✓ 110 S. Coal stripping in Upper Kittanning. Abandoned. was operated by

Attitude at SE cor. on floor below face N 36° E, 9 to 12° W.

At W end of strip there was an old opening; tipple stands but entry obliterated by strip. Several dozer gouges S. of strip on S side powerline on crop of the coal

✓ 111. S Bowman Bros. stripping in Upper Kittanning coal. (Operating - begun spring 1948)

112. Coal blossom in road gutters. Underlain downhill to N. by varieties of claystone; uppermost appears to have been dark gray. Fragmental flint & flinty claystone found in float below the gray claystone.
Bluish soft clay near base of slope may be in part surficial.
Seep to W. of road at foot of slope.
Above blossom SS. comes in.
Compare with section at 113.

113. Ditchcrop of weathered gray-white plastic clay which is underlain by claystone, silty claystone and fragmental flint and claystone.
S.S. comes in on top of rise to N.
Seep to E. of road at foot of slope.

Good setup for soft clay here. Could probably be stripped if of good grade.

Both this & 112 probably Bolivar with U.F. missing in 113 & L.F. basal seep in both.

✓ 114. s. Old Boucher Mine in Upper Freeport. (QS-87) Several caved openings with shale roof. showing.

✓ 115. Caved openings in gulley below Boucher Mine. Coal (boney) + shale on dump, seepage up gulley & down. Lower than coal in Boucher mine, may be Lower Freeport.

✓ 116. Old caved mine. Opened on crop + mined down dip.

✓ 117. Jame P. Willey opening in coal. Supposedly about 3' coal here. Now caved but over 2' smut on crop.

✓ 118. Old openings in Upper Freeport made by James P. Willey. Three in all. Coal reported to be (by Snyder) 25 to 30" above, binder 45" below.

✓ 119. Burkholder opening, caved, in coal. Shale roof, thickness of coal not known.

√ 120. Old caved opening of Albert Hettrick. Hettrick reports 21" coal. Shale roof. Hettrick reports 'rock' bottom. Heading N. 38 E. (on level according to H.)

√√ 121. Two openings in the ~~Brush Creek~~ coal. Abandoned + caved.

~~A. Christian Orendorf opening (QS. # 70) see section.~~

B. ~~Ernest Bowser opening (QS. # 71) – See~~ Also orendorf.

122. Coal prospect. Looks to be about Mahoning but may be Brush Creek.

123 Section exposed in gutter of Accident road. Paced down (W) rd from fence corner at X.

Lith	Paces	Approx. Feet
Obscured	25	
Heavy seepage in grassy flat. Surficial clay in gutter. Coal blossom at W end.	12	
Mottled surficial clays – no bedrock	17	
No bedrock. Heavy ss float + topog. drop suggest ss. Small seep at W. end	30	
No bedrock – minor seepage E end, weathered shale west end (see next interval).	19	
Black shale trading to shaley siltstone with plant remains. Att. N. 26. E, 8 to 11°, minor fault cuts chaks striking N 52 W. In lower 15 paces ss lenses come in + predominate. Heavy ss float shows off road at this interval. At W end coal blossom in ss with ss layers.	33	
SS. (cyl) on claystone with traces of coal smut seen just above.	5	
Obscured.	7	

(	Siltstone + silty claystone weathered yellow	5
(	Gray to black siltstone, plant frags	20
(	Flaggy ss. 2 to 8" beds.	14
(	Obscured	6
(	weathered gray to bl. sh. with plant fossils.	
(	Good coal smut at base.	13

This coal partially exposed in gulley S of rd shows overburden resting on 15" coal.

(Flat with bedrock obscured) 42

Surficial clay with red bed streaks

124. S. The old Leyeer mine. (Info from 2nd coal report.) Slope entry thru rock tunnel to coal. See p. 284 for details. Now abandoned.

125. Farmer reports an old opening in Brush Creek here. Now completely obliterated if there ever was one.

126. Old opening or prospect in Brush Creek. No record of it, Wiley may have done it.

127. Shale with marine fossils, Brush Creek.

128. Ditch crop on Amish rd. N. of church. At church platey ss float (plus small fragments of stoney flint which may be coming from up hill back of church) Then coal blossom comes in and patches of it continue for 100' or more down rd. to N. On map position of highest blossom only shown. No exposure

of coal or beds over or under in situ. Black shale in with coal in blossom.

129. Float of stony dark brown to black flint + flinty claystone. Present in surficial clays as well as on road so may be local rather than brought in. Only bedrock at top of rise where platey ss present. Attitude on latter N 38 E, 8° E.

130. Exposures along Amish rd. Starting at N —

- Smut streak in surficial clay; under it to N silty claystone + siltstone with plant fragments.
- Flaggy ss, probably cross laminated. Has interbedded siltstone. Attitude N 2° E, 14° E
- Dark gray 'run of mine' clay underlain by 4" to 6" claystone, locally fragmental, with plant rootlets. Grades to dark gray silty claystone.
- About 3" streak blossom in clay.
- Black fissile shale. Attitude N 36° E, 10 to 15°. (15° common)
- Coal smut - looks like crop, in gutter. Overlain by flaggy ss with interbedded shales which appears to grade into

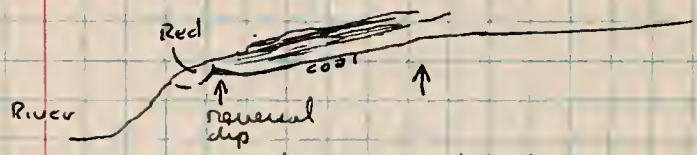
black shales above.
Below smut chiefly wash of surficial clay. Coaly streak appears near base of hill.

131. Weathered cut exposing black shale overlying soft clay. Sandstone float comes above, ~~to N~~, ss crop in road to N. The shale-clay crop is cut along strike by road and appears flat lying.

132. S Crop of lower Mt. Savage coal (?) in road gutter. (See also composite section of U.F.B.Co. stripping — 133)

133. S Negro Mt. stripping of the Union Fire Brick Co. In the Mt. Savage clay. Operation takes clay and coal. See File on U.F.B.Co for details of stripping.
Coal & clay sections & composite section in file.

134 s. U.F.B.Co. "Church property" stripping. In Mt. Savage. Foot of stripping a mass of ss fragments etc in red clay. Could be



seepage-stained ~~talu~~ mantel from seepage off Mt. Savage section. May mark fault but no evidence for displacement except slight reversal of dip at foot (this could also be caused by cropping.) Three sections coal taken as marked.

135. s. "Kiester" stripping. Actually the Burnwell Coal Co. stripping. In ~~Upper Kittanning~~. Midl. Ki

136. Outcrop of Upper Bakerstown coal at spring on Guy Stantons farm.

137. Outcrop of coal and black shale in road cut. About at Barton horizon.

138. Gray to black shale + shaley claystone underlain by coal smut (shows on S side of rd) Shales mostly with fragmental plant remains, but a few marine fossils present in lower part. Brush Creek horizon.

139 Adit in face of Kiester stripping.

140 Jenkins mine. Several adits in ~~Upper~~ Kittanning coal.
Middle

141 Area of heavy flint clay float on flat just E of sharp rise on sandstone. Can be reached by old trail leading up mountain from where Little Laurel run crosses shale road. Also on flat is white soft clay.

142 Area underlain by clay. Patches gray-white soft clay exposed. Some flint chips near road where gulley crosses rd.

143. Seep along road. In woods to E old test pit put down by Mathias of U.F.B. Co. Letter says shallow, in wash of flint frags + soft clay all the way. Probably was just of crop where streams had worked material.

Two gulleys just to N are full of the flint clay fragments.

144. Drill holes put down by Marshall McKenzie for Baltimore interest. M-1 and M-2 are located fairly accurately. M-3 group of 3 approximate, M-4 in approx. area.

According to McKenzie

M-1 — 15' to base of 30" coal seam

M-2 — 30' to base of 30" coal seam

M-3 — Cut 48" coal with knife blade binders 4-8" from base. McK is not so sure of third hole in SW corner.

(CONTINUED IN BOOK 2)

1 to 51 incl Brittingham Quad.

Part 3.

Prospects

1. S Brenneman ~~Mine~~. Crop ~~mine~~ faced on Upper ~~Lower~~ Bakerstown coal. Massive ss crops above prospects (Saltsburg.) Attitude on shaly ss in gulley below prospects N 21° E, 5° W

2. X Old Brenneman openings on ~~Upper~~ Lower Bakerstown coal. Abandoned and caved.

3. S Broadwater Mine, owned by ~~Stanton~~ (Stanton Mine on map) + Deffenbaugh. On crop of Lower Bakerstown coal. Adit about N 60° E.

4 X Caved adit on crop of Upper Bakerstown coal. Old Morgart #4 mine.

5 ~~Pit~~ Mine in Harlem coal. Caved but shows some coal and overlying shale with marine fossils. Opened by Louis Hoover. Adit 40' above stream.

6. S Old openings, abandoned. ~~Pit, caved, Morgart says it's Harlem, check this.~~ Opened by Louis Hoover. In Harlem coal.

7. Pottsville - Mauch Chunk contact - approx. Red shale in road gutter.

Mine Sections Area 3

Station

1. USGS Section.

USBM
(Records dip of 5° N 50 W)

Black silty claystone roof
Coal ——— 10
Bone ——— 6
Dirty coal ——— 6
Bone & carb shale ——— 10
Gray clay

3. USBM Section

Dip 6° N 50° W, drift S 40° E.

Roof sandy shale
Bone ——— 3½
Coal ——— 4
Bone ——— 1
Coal ——— 17½
Clay bottom

6. USGS Section

Black shale with marine fossils
Limestone, fossiliferous ——— 7
Black shale, " " ——— 18
Coal ——— 24
Light gray silty claystone

9. USGS Section

Black shale roof
Bone ——— 4½
Black shale ——— 2
Coal ——— 26
Gray soft clay bottom.

Attitude on coal

N 45° E 5° W

8. Outcrop of coal and clay. Black shale and coal smut underlain by soft clay with zone of gray flint clay and silty flint clay at base.

9. Crop mines in Lower Bakerstown.

10. Red & variegated clays of ~~Pittsburgh~~ red bed crop out in road gutters.

11 A wet-weather seep at approx position of ~~Harlem~~ coal.

12 Sandstone(-Saltsburg-) and wet weather seep at approx position of Upper Bakerstown.

13 S. Outcrop of Lower Bakerstown and shales above. Only thin silty clay grading to siltstone below. Attitude on latter - N 40° E, 10 to 15° NW.

13.

15. USBM Section

Shale roof (Thin – roof of Massive ss predominates)

Bone ——— 2

Coal ——— 46

Bottom of gray clay

Dip 16° N 50° W.

38. USGS Section

Black shale roof

Coal – 39"

Soft clay bottom.

Attitude on coal

N 70° E, 5° W.

40. U.S.G.S. Section

Dark gray shale roof

Coal — 39 to 40

Gray clay bottom

Dip 4° W.

14. Coal 'blossom' and soft clay crop. Many seeps locally, 'blossom' may be wash.

15. S Morgart #3 Mine. Upper Freeport coal.

16. Ledge of massive medium- to coarse-grained sandstone.

17. At intersection there is considerable amount of fine shards of flint clay in surficial material May be from #44 above.

18. Outcrop of sandy shales and siltstones. Attitude N 37° E, 15 NW. Seep to west down road may indicate position of coal.

19. Pit and bulldozer gouge into outcrop of coal and flint clay. Coal overlain by heavy sandstone. Flint clay good. 2' +. in strip, pit waterfilled.

Middle ~~Upper~~ Kittanning horizon.

49. To [illegible] [illegible] [illegible],

56. U.S.G.S. Section

Dark gray shale roof

Coal ———— 53

Dark gray soft clay bottom.

Location? Navl G. #24

Attitude on coal, N 65° E, 9° W.

73. USGS Section

Flaggy ss.

Black shale roof (7' 8")

Coal ———— 18½

Black shale ———— 2½

Light gray soft clay

Attitude N 13° W, 3° E

20. ~~Coal smut in road gutter.~~ Coal blossom plowed up by Beitzel in corner of field.

21 Coal smut in road gutter. Fed. Hill or Barton

22 Bank of Ames shale on N. side of road. Harlem coal crops in gutter at base of shale.
Attitude.

23 Slope mine to Lower Bakerstown. Connects underground with Beitzel mine (24.). Opened by Fred. Bittinger. Abandoned + caved.

24 Beitzel mine. Lower Bakerstown. (John Beitzel) This entry now abandoned. See #56 entry just across road.

25 Old opening in Brush Creek coal, caved and abandoned.

26. Carbonaceous shale and some coal smut. Below this some soft clay and then seam of flint clay as follows.
6"+ somewhat silty semiflint.

76. USGS section

Sandstone
Silty gray shale 0 to 2ft
Coal with thin shale partings — 25
Shale ——————————— 1
Boney coal ——————————— 5
Gray clay bottom ————————
Attitude on shale. N 67° E, 17° E.

78. USGS section

Dark gray shale roof
Coal ——————— 10
Gray clay ——— 3 feet — 10
Coal ——————— 8
Shale ——————— 1
Coal ——————— 15
Boney coal ——— 1
Dark gray shale - 6
Gray soft clay.

Attitude on coal N 17° E, 5° E

1½ to 2' Gray flint clay, may have some impurities in dark streaks. (Fe?)

2'+ Siliceous flint clay and silty claystone.

Two samples taken (channel)
CB-4 of whole seam. (upper 4')
CB-6 of the 1½ to 2' of good gray flint
This coal & clay estimated to lie > 300' strat. below L.B. in interval of Upper Kittanning.

27. Carbonaceous shale in road cut, seep just to S on E side of road.

28. Road cut on E side shows section north to south as follows:-

3'+ Gray (light-weathering) somewhat silty plastic clay.
6" or less of dark to light gray semi flint and minor flint.
4" Fe-stained zone.
6" Gray mottled plastic clay.
3'± Siltstone & silty shale. Shaky siltstone, greenish, with worm trails, at base.
Attitude N 38° E, 11° W.

29. On same side of road & just past #28. Weathered outcrop shows carb shale flakes and in flat just to S there is a seep.

30. Outcrop area of locally quartzitic, locally conglomeratic ss.

31. Road crop of coal and red bed - presumably Lower Bakerstown and Meyersdale red.

32. Outcrop of Lower Bakerstown coal and underlying clay

33. The L. Bakerstown underclay well exposed in gulley. About 8' of this (Thomas) clay exposed. 6' from soil zone (roots etc.) to gulley base was sampled - #CB-5. The clay is good enough for mix with flint in refractories.

A considerable area south of the recreation area road and between Pleasant valley dam and Swanton rd. must be underlain by this clay at shallow depths.

This is one of best prospects for a strip mine in soft clay in basin. Draw back is that land under 99 year lease to state.

34 Crop of Lower Bakerstown coal and Meyersdale red beds.

35 Coal crop, may be either Upper or Lower Bakerstown.

36 Seeps – several along old road.

✓ 37 Old opening, ~~presumably~~ in Lower Bakerstown. Oester mine. Caved.

✓ 38. S Mine in Lower Bakerstown. Mrs. Dennis Brenelman. (Working summer 48)

39 Prospect in Brush Creek coal, many fossils in material on dump. A second prospect to W on hill did not go to the coal. N39°E, 9°W on roof shales
Henry Beitzel.

✓ 40. S Mine in Lower Bakerstown coal. Opened by Fred Bittinger. (Working summer '48)

41. Coal smut in road gutter in front of house.

42 Weathered clays probably red, with carb clay streak in mid. part. Underlain by slabby, thin-bedded ss. Attitude:

43 Same set up as 42. Considerable zone red clay, carb streak appears to be in upper half (lower part). Below clays silty claystones grade to thin bedded sandstones down hill to N. ~~At top of~~ Up hill to S blocks of med. gr. ss begin to appear in float. Crest of hill may be capped with it. Attitude:

44. Flat just east of sharp rise on sandstone shows much flint clay float and patches white plastic clay locally.

45 Flint clay chips in float at road gutters. Probably where clay of 44 crosses road.

46. Outcrop of black shale on old road. Weak seep comes in just up rise to E. Then sandstone

47. Attitude on <u>sandstone</u> ledge, N side stream. N 39 E, 12 W. This may be Mahoning. Station misplaced on map — correct position indicated by arrow.

48. Caved prospect opened by Gilbert Green. Heading was S 7° E.

✓ 49 S One working (summer 1945) and several abandoned openings in Lower Bakerstown coal

✓ 50. Abandoned and caved mine in Lower Bakerstown, John Beitzel property. Heading N 70° E.

51. Old coal prospect, filled in & plowed under. 18" coal reported. Probably Brush Creek.

52. Attitudes on shaley silty claystone NS. 6°E + N 43°E, 1°E, + N 18°E 6°E.

53. Black shale and coal in road bank.

54. Abandoned and caved mine of Jake Beitzel's. He reports: C-6", Slate 12", C-22", fire clay bottom. Upper coal pinches out 6' back in mine. Both mines probably Jake's. N. one, definite

55. Attitude on shaley silty claystone, some interbedded fine ss. N 53°E, 7°E

56. S Opening in Lower Bakerstown, leased by Ray Klotz from John Beitzel. Working summer 1948

57. Opening in Harlem coal, Fazenbaker Mine. Black shale + argillaceous ls with marine fossils on dump. Abandoned + caved. Heading S. 65 E.

58 Numerous pits opened in Harlem by Henry Beitzel between here and #59. Dumps show black shale with marine fossils. Coal reportedly 18 to 22 inches. Caved.

59 See 58 above.

60 Abandoned and caved mine in Harlem. Heading S 65° E. Either Henry or George Beitzel or both opened it.

61 Quarry in argillaceous limestone. Sandstone float comes in above it

62 Prospects, coal and black shale on dump.

✓ 63 Coal mine opened by Sam Brennaman and Herman Opel. Abandoned and caved. A second, older, opening 300' to north. Jake Bittinger reports "30 to 36 inches".

✓ 64 Old opening, caved and filled, Buckle property. May be Barton or thereabouts.

✓ 65 Abandoned and caved mine in Harlem coal opened by George Beitzel. Black shale with marine fossils on dump. Several older entries immediately adjacent. Reportedly 18" coal.

✓ 66. Coal mine in Harlem opened by John C. Beachy. Black shale with marine fossils on dump. Abandoned & caved.

✓ 67. Abandoned and caved mine. Gray shale roof. Reportedly 22" coal. Heading N 50 E. Opened by ?, on Irvin Beachy property

✓ 68. Several openings made by Ed Alexander. Coal worked down dip. Local farmer gives following section from memory—

68. (cont.)

Coal 10"
Shale binder 6"
Coal 30"
Binder 1"
Coal 4"

Openings abandoned and caved.

Probably a Kittanning tho section resembles Freeport.

✓ 69. Opening abandoned + caved, made by Jim Knox. Reported to have section similar to # 68.

70 Coal prospect and two coal crops, one above and one below the prospect.

Upper crop.- Coal overlain by black shale, underlain by red bed.

Prospect shows dump of bone, coal + shale, Bill Bowser reports "over 2' of coal"

Lower crop in gulley at side of old road. Approx. inches coal, red bed comes in 2 ½ feet below.

71.

✓ 72. Abandoned mine. Property of Silas Beechy who says it is Harlem. Shale with plant fossils but no marine fossils on dump. Caved.

✓ 73. s Abandoned mine (not caved '48) opened by Jim Knox. Maylan Bender said to have worked it last.

74. Coal prospect. . Slate roof, 6" coal + fire clay bottom reported.

75 Verbal section of drill hole put down by Jake Beitzel here – J.B. says "Slate 25 ft, Coal 6", fire clay bottom.

✓ 76. s Abandoned mine opening on W side Negro Mt. Crest. Coal and black shale on dump. Opened by Jake + Louis Beitzel.

✓ 77. Abandoned and caved mine opened by Silas Ashe

✓ 78 s. Openings of Raymond Klotz. ~~Attitude on Shale~~ Three adits. Middle one sectioned.

79 Old (70yr) prospect of Peter Opel, now filled in with field stone. Opel reports 15" coal overlain by black shale. Thought to be 'fossil' by Opel.

Brush Cr. 22 L.B.

80 Abandoned and filled in opening made by Selder Bros. and John Beachy

81. Abandoned and caved mine last worked by John Klotz. Klotz reports 16 to 18" of dirty coal mixed with shale. He thought it to be Upper B., but couldn't find Lower B. below it. Heading S 75° E.

82 Opening of Urias Knox, abandoned + caved.

Coal reported to be 14" and overlain by 15' of black shale (according to John Klotz) Heading N 73° E.

83 Coal prospect. Black shale with marine fossils on dump. John Klotz did it.

84.

85.

86. Black shale and blossom cropping in road gutter.

87. Black shale outcrop in road bank. (May be some blossom)

88 Attitude on shaley siltstone, N65E, 16E

✓ 89 Abandoned, caved, and filled Harlem opening of Clarence Wiley. Black shale with marine fossils on dump.

✓ 90. Abandoned and caved Harlem opening of Clarence Wiley. Black shale with marine fossils on dump. Heading N3E.

✓ 91. Abandoned and caved opening of John Brennaman. Solomon Orendorf reports coal called "Honeycomb" and had 28" coal with rider 6' above.

✓ 92 ~~14~~ Opening of Herman Opel. Not working but open (Summer 1948) Water filled.

93. Series of abandoned and caved pits and openings between here and #91, can all be included as Brennaman mine.

(411)

doc. 511

AGE: Pennsylvanian ROCK UNIT: Brush Creek Sh. COLL. OR LOC. NO. A-848

MAJOR AREA & MAP: Maryland, Castleman Basin Garrett Co ACC. NO. 8117 ~~7211~~

ORGANISMS: Mollusca

COLL. BY: K. M. Waage 1947-1949

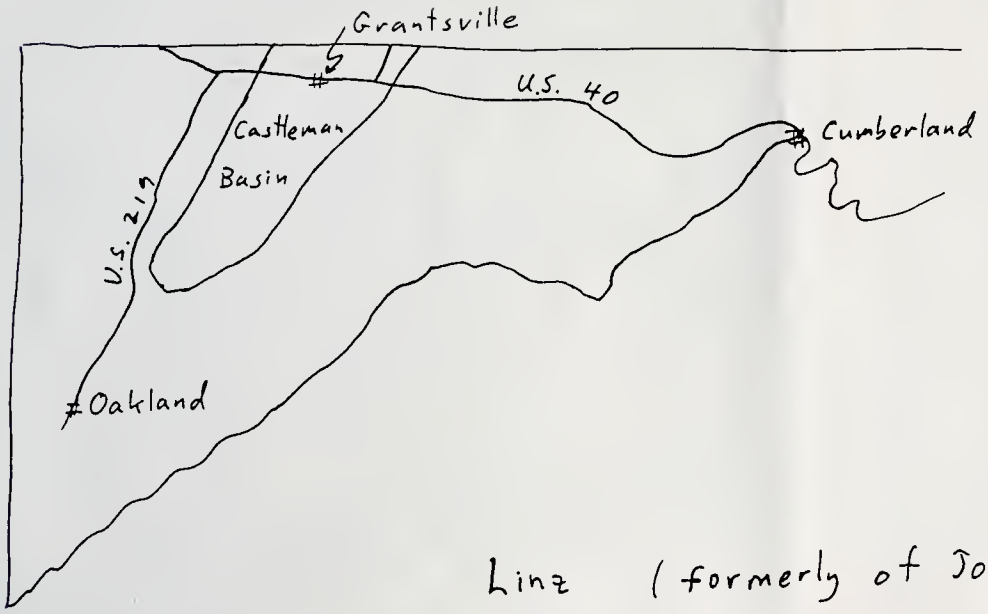
ORIGINAL NO. & DATE: C. MacClintock 2/66

ENTERED BY: DATE:

COLL. OR LOC. DESCR.: "Cyclothem components and other sed. rock specimens". One small chunk of black shale from a drill core. From Brush Creek sh. of lower Member of Conemaugh fm. from Castleman Basin of western Md. See Waage K. M., 1950, Refractory clays of the Maryland Coal Measures: Md. Bd of Nat. Resour. Dept. of Geol., Mines and Water Resource., Bull. 9" See also A-4635

(Note map reverse side of this card)

See also A-46



Linz (formerly of Johns Hopkins) received about 10 drawers of cores from K.M.W. and published on fauna in Jour. Paleo.

Key to maps

X Coal mine adit, working or abandoned
direction of main (strike) heading

X p Pit or prospect in coal

X c Coal outcrop (in field or woods)
or – • • • • if continuous for any distance

Road cuts

X Approx. crop of coals in sections between adjacent drill holes.

X marine fossils in roof shale

coal crop or smut or blossom.
black shale
fossiliferous (marine) shale
red beds (or in fields)
sandstone

iron-pellet clays (generally weathered red-bed horizons)

Clay
Flint clay
Plastic clay

• clay sample
CB-5

▫ test pit in clay or coal

o seeps - fe stained or oily

ϕ coaly wash.

Trace of coal seams

Harlem
Lower Bakerstown
Brush Creek
Upper Freeport
Upper Kittanning
Others

U.S.B.M. Proj. 823 D.D.H's

Foreign (deep) DDH's (Churn it C in circle.)